BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work:- Improvements of parks and providing children play equipment's in Telecom Layout surrounding in ward No-5

Est Cost: =300 Lakhs

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.143, I.No.19.1 of PW, P&IWTD SR 2018-19)								
	Telecom Layout Park	Cum							
	For Gym Platform	5	1	10.00	12.00	0.25	150.00		
	For Children's Equipment	3	1	15.00	15.00	0.35	236.25		
	Gym Equipment Post	5	12	0.60	0.60	0.60	12.96		
	Post for Chain Link Fencing	1	33	0.40	0.40	0.40	2.11		
	New Cobble								
	Connecting Pathway	8	1	10.00	2.00	0.15	24.00		
	Pathway								
	New Footpath in Telecom Lyt Park (Widening Portion)	1	1	485.00	1.30	0.30	189.15		
	Deduction								
	Gym Equipment Post	5	-12	0.60	0.60	0.25	-5.40		
	Acupuncture footpaths	1	1	50.00	1.75	0.20	17.50		
							626.57	211.79	**132700.43**
	A)Basic rate	**130.00**							
	Loading and unloading with 5km lead= 1.78x1.28x5 = 69.80	**69.80**							
	C)Area Weightage 6%)	**11.99**							
	Total	**211.79**							
	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. MORTH Specification No. 2100 (P.No.222, I.No.27.18 of PW P&IWTD S.R 2018-19)								
	For Bed	Cum							
	For Gym Platform	5	1	10.00	12.00	0.10	60.00		
	Gym Equipment Post	5	12	0.60	0.60	0.10	2.16		
	Post for Chain Link Fencing	1	33	0.40	0.40	0.10	0.53		
	Deduction								
	Gym Equipment Post	5	-12	0.60	0.60	0.10	-2.16		
	Acupuncture footpaths	1	1	50.00	1.75	0.10	8.75		
							69.28	5421.90	**375618.39**
	A)Basic rate	**5115.00**							
	B)Area Weightage 6%	**306.90**							
	Total	**5421.90**							
	KSRRB M2200-5.9. Providing and laying Design mix M20 with OPC @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.46cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 including cost of materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. - i) Upto 5 m height (P.No.227, I.No.28.7.9 of PW, P&IWTD SR 2018-19)								
	RCC Concrete for Posts	Cum							
	Gym Equipment Post	5	12	0.60	0.60	0.50	10.80		
	Post for Chain Link Fencing	1	33	0.40	0.40	0.30	1.58		
							12.38	5483.38	**67906.18**
	A)Basic rate	**5173.00**							
	B)Area Weightage 6%	**310.38**							

	Total	**5483.38**							
4	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.13, I.No. 4.6 of PW, P&IWTD SR2017-18)								
	Coping Concrete	Sqm							
	Embeded of Pebble Stone in Concrete								
	Acupuncture footpaths	1	1	50.00	1.75	0.10	8.75		
							8.75	5855.76	**51237.90**
	A.Basic rate	**5422.00**							
	B.Area Weightage 6%	**433.76**							
	Total	**5855.76**							
5	KSRRB M400-19: Construction of Median and island above road level with approved material deposited from borrowpits, spread, sloped and compacted as per Clause 400.7 complete as per specifications. MORTH Specification No.407 (P.No155 of I.No.20.20 in PW,P&IWTD SR 2018-19)								
	Telecom Layout Park	cum							
	For Gym Platform	5	1	10.00	12.00	0.20	120.00		
	For Children's Equipment	3	1	15.00	15.00	0.20	135.00		
	New Cobble								
	Connecting Pathway	8	1	10.00	2.00	0.20	32.00		
	New Footpath in Telecom Lyt Park (Widening	1	1	485.00	1.30	0.20	126.10		
	New Cobble at Missing Length								
	Consider 50% as Damaged Cobble	1	1	270.00		0.20	54.00		
	Deductions								
	Gym Equipment Post	5	-12	0.60	0.60	0.20	-4.32		
							462.78	221.54	**102524.28**
	A.Basic rate	**209.00**							
	B.Area Weightage 6%	**12.54**							
	Total	**221.54**							
6	KSRRB M400-17: Providing, laying, spreading and compacting graded stones aggregate to Wet Mix Macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mix method of tipper to site,Laying in uniform layers with paver in subbase/base course on the well prepared surface and compacting with vibratory rollers to achive the desired density complete as per MORTH specification No. 406.etc with all lead and lifts and as per directions of the Engineer-in-charge(Page No:155 Item No: 20.18, of KPWD SR Bangalore Circle 2018-19)								
	Telecom Layout Park	cum							
	For Gym Platform	5	1	10.00	12.00	0.20	120.00		
	Deductions								
	Gym Equipment Post	5	-12	0.60	0.60	0.20	-4.32		
							115.68	2001.28	**231508.07**
	A.Basic rate	**1888.00**							
	B.Area Weightage 6%	**113.28**							
	Total	**2001.28**							
7	Providing and laying/fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick for flooring conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, including cutting, griding the edge to half/full round wherever required, labour, curing complete as per specification. (P.No. 109, I.No. 14.62 of PWD SR 2018-19)								
	Telecom Layout Park	Sqm							
	For Gym Platform	5.00	1.00	10.00	12.00		600.00		
							600.00	1305.92	**783552.00**
	A.Basic rate	**1232.00**							
	B.Area Weightage 6%	**73.92**							
	Total	**1305.92**							

8	KSRB 14.6-1: Providing & laying heavy duty cobble stones 60mm thick interlock pavers,using cement & course sand for manufacture of blocks of approved size ,shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (Avg thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS (P.No 103 of I.No.14.6 in PW,P&IWTD SR 2018-19)								
	Cobble R&R	Sqm							
		1	1	450.00	1.20	--	540.00		
	Consider 50% as Damaged Cobble						-270.00		
							270.00	575.89	**155489.03**
	Basic Rate (a)	**1053.00**							
	Deduct Cobble stone rate (b)	**-424.76**							
	Deduct 10% of (b) Over Head charges (c)	**-42.48**							
	Deduct 10% of (b) Contractor Profit=(d)	**-42.48**							
	Arrived Rate	**543.29**							
	Area Weightage 6%	**32.60**							
	Final Rate	**575.89**							
9	KSRB 14.6-1: Providing & laying heavy duty cobble stones 60mm thick interlock pavers,using cement & course sand for manufacture of blocks of approved size ,shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (Avg thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS (P.No 103 of I.No.14.6 in PW,P&IWTD SR 2018-19)								
	New Cobble	Sqm							
	Telecom Layout Park								
	Connecting Pathway	8	1	10.00	2.00	--	160.00		
	New Footpath in Telecom Lyt Park (Widening Portion)	1	1	485.00	1.30	--	630.50		
	Consider 50% as Damaged Cobble						270.00		
							1060.50	1116.18	**1183708.89**
	A.Basic rate	**1053.00**							
	B.Area Weightage 6%	**63.18**							
	Total	**1116.18**							
10	KSRRB 2.6:Providing and filling Sand in trenches to required depth including watering ramming with all leads and lift. complete as per specification and as directed by Engineer-in-charge (P.No.7, I.No.2.13 of PW,P&IWTD SR 2018-19)								
	Telecom Layout Park	Cum							
	For Children's Equipment	3	1	15.00	15.00	0.30	202.50		
							202.50	2183.60	**442179.00**
	Basic Rate (a)	2060.00							
	AW 6%	123.60							
	Grand Total	**2183.60**							
11	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete. (P.No 27 of I.No.5.30 in PW,P&IWTD SR 2018-19)								
	Telecom Layout Park	No.							
	For Gym Platform	5	1	44.00	--	/0.45	489.00		
	For Children's Equipment	3	1	60.00	--	/0.45	400.00		
	Connecting Pathway	8	2	10.00	--	/0.45	356.00		
	New Kerbs for Damaged Length								
		1	2	485.00	--	/0.45	2156.00		
							3401.00	432.48	**1470864.48**
	Basic rate	**408.00**							
	Area Weightage 6%	**24.48**							
	Total	**432.48**							
12	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180. litem no.24.1 of KPWD S.R Bangalore Circle 2018-2019)								

	Telecom Layout Park	No.							
	For Gym Platform	5	1	44.00	--	0.35	77.00		
	For Children's Equipment	3	1	60.00	--	0.35	63.00		
	Connecting Pathway	8	2	10.00	--	0.35	56.00		
	Kerb Painting	1	2	485.00	--	0.35	339.50		
							535.50	84.80	**45410.40**
	Basic rate	**80.00**							
	Area Weightage 6%	**4.80**							
	Total	**84.80**							
13	Providing chain link fencing 50mm size of 8 guage properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint (P.No 266 of I.No.37.3 in PW,P&IWTD SR 2018-19)								
	Telecom Layout Park	Sqm							
	Chain Link Fencing for Missing Length	1.00	1	100.00	--	2.10	210.00		
							210.00	757.90	**159159.00**
	Basic rate	**715.00**							
	Area Weightage 6%	**42.90**							
	Total	**757.90**							
14	Providing and fixing M.S. Block pipe of 38mm dia, of heavy guage of 14 including removing the bends, cutting the pipe, and fixing pipe in between the existing two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary with all lead and lift as directed by the Engineer-in-charge of work etc., complete including two coats of approved quality paint over one coat of shop paint. (P.No.266 I.No.37.4 of PW,P&IWTD SR of 2018-19)								
	Horizontal Pipe for Chain Link Fencing	m							
		1	2	100.00			200.00		
							200.00	432.48	**86496.00**
	Basic rate	**408.00**							
	Area Weightage 6%	**24.48**							
	Total	**432.48**							
15	Supplying and fixing M.S. Rectangular poles made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1:2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 cms. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of the Engineerin - charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete) (P.No 266 of I.No.37.2 in PW,P&IWTD SR 2018-19)								
		m							
	Post for Chain Link Fencing	1.00	33	2.10	--	--	69.30		
							69.30	910.54	**63100.42**
	Basic rate	**859.00**							
	Area Weightage 6%	**51.54**							
	Total	**910.54**							
16	Providing and fixing M.S.Gate as per Chief Architect Drawing, using 50mm x 50mm 14 guage M.S. hollow pipe frame work bent to ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c in two halves and 40mmx6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members as Shown in the drawing etc., complete all the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specification. ((P 42/ I.7.37) PW,P & IWTD SR -2018-19)								
	Main Gate for Park	Sqm							
	Gate	1.00	1	1.50		1.80	2.70		
							2.70	3192.72	**8620.34**
	Basic rate	**3012.00**							
	Area Weightage 6%	**180.72**							
	Total	**3192.72**							

17	KSRB 15-18.2 : Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complate as per specifications.(P 120/ I.15.74 PW,P & IWTD SR - 2018-19)								
	Painting of Metal Surface	Sqm							
	Main Gate for Park	1.00	1.00	1.50		1.80	2.70		
							2.70	100.70	**271.89**
	Basic rate	**95.00**							
	Area Weightage 6%	**5.70**							
	Total	**100.70**							
18	Direction and Place Identification Signs with size morethan 0.9 sqm Size Board: Providing and erecting direction and place identification retro-reflectorised sign as per IRC:67 made of high intensity grade sheeting vide Clause 801.3, fixed over aluminium sheeting, 2 mm thick with area not exceeding 0.9 sqm supported on a mild steel single angle iron post 75 x 75 x 6 mm , 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing. (P 180/ I.24.4 PW,P & IWTD SR - 2018-19)								
	Information Board	m							
		4	2	1.50	--	2.50	30.00		
							30.00	7557.80	**226734.00**
	Basic rate	**7130.00**							
	Area Weightage 6%	**427.80**							
	Total	**7557.80**							
	GYM EQUIPMENTS								
19	Supply & fixing of Pull Down Challenger : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. The seat and backrest is made from Rotomoulded LLDPE. Bearings : Maintenance-free ball bearings. Equipment which have sway and moving parts, must have built in limitors that prevent unwanted and ecesssive movement, which can cause injuries. The limitors must be in accordance with EN16630 safety norms. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 2570 MM x 840 MM x 2200 MM . Capacity 2 persons								
	PULL DOWN CHALLENGER	Unit					5.00		
		5.00	1						
							5.00	296000.00	**1480000.00**
20	Supply & fixing of Seated Chest Press : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. The seat and backrest is made from Rotomoulded LLDPE. Bearings : Maintenance-free ball bearings. Equipment which have sway and moving parts, must have built in limitors that prevent unwanted and ecesssive movement, which can cause injuries. The limitors must be in accordance with EN16630 safety norms. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 1955 MM x 730 MM x 1955 MM . Capacity 2 persons								

	SEATED CHEST PRESS	Unit					5.00		
		5.00	1						
							5.00	287500.00	**1437500.00**
21	Supply & fixing of Self Weighted Rower : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. The seat and backrest is made from Rotomoulded LLDPE. Bearings : Maintenance-free ball bearings. Equipment which have sway and moving parts, must have built in limitors that prevent unwanted and ecesssive movement, which can cause injuries. The limitors must be in accordance with EN16630 safety norms. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 1390 MM x 805 MM x 1198 MM . Capacity 1 person								
	SELF WEIGHTED ROWER	Unit					5.00		
		5.00	1						
							5.00	206250.00	**1031250.00**
22	Supply & fixing of Rider : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. The seat is made from Rotomoulded LLDPE. Bearings : Maintenance-free ball bearings. Equipment which have sway and moving parts, must have built in limitors that prevent unwanted and ecesssive movement, which can cause injuries. The limitors must be in accordance with EN16630 safety norms. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 910 MM x 655 MM x 1210 MM . Capacity 1 person								
	RIDER	Unit					5.00		
		5.00	1						
							5.00	112500.00	**562500.00**
23	Supply & fixing of Bicycle : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. The seat is made from Rotomoulded LLDPE. Bearings : Maintenance-free ball bearings. Equipment which have sway and moving parts, must have built in limitors that prevent unwanted and ecesssive movement, which can cause injuries. The limitors must be in accordance with EN16630 safety norms. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 1000 MM x 500MM x 1290MM . Capacity 1 person								

BICYCLE	Unit							
	5.00	1				5.00		
						5.00	156250.00	**781250.00**
Supply & fixing of Arm & Pedal Bike : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. The seat is made from Rotomoulded LLDPE. Bearings : Maintenance-free ball bearings. Equipment which have sway and moving parts, must have built in limitors that prevent unwanted and ecesssive movement, which can cause injuries. The limitors must be in accordance with EN16630 safety norms. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 830 MM x 500MM x 1450 MM . Capacity 1 person								
ARM & PEDAL BIKE	Unit							
	5.00	1				5.00		
						5.00	212500.00	**1062500.00**
Supply & fixing of Tai Chi Spinners : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Bearings : Maintenance-free ball bearings. Equipment which have sway and moving parts, must have built in limitors that prevent unwanted and ecesssive movement, which can cause injuries. The limitors must be in accordance with EN16630 safety norms. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 1150 MM x 1120 MM x 1620 MM . Capacity 2 persons								
TAI CHI SPINNER'S	Unit							
	5.00	1				5.00		
						5.00	143750.00	**718750.00**
Supply & fixing of Big Shoulder Wheel : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Bearings : Maintenance-free ball bearings. Equipment which have sway and moving parts, must have built in limitors that prevent unwanted and ecesssive movement, which can cause injuries. The limitors must be in accordance with EN16630 safety norms. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 845 MM x 810MM x 1710MM . Capacity 2 persons								
BIG SHOULDER WHEEL	Unit							

		5.00	1				5.00	
							5.00	150000.00	**750000.00**
227	Supply & fixing of HD Double Health Walker :All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out in excess of at least 50 public park projects in India either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Footplates made of alloys of Nylon having good thermal stability. Internal Limited means no bump stops or crush points. Bearings : Maintenance-free ball bearings. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 2015 MM x 615 MM x 1360 MM . Capacity 2 persons								
	HD DOUBLE HEALTH WALKER	Unit					5.00		
		5.00	1						
							5.00	120000.00	**600000.00**
228	Supply & fixing of HD Sit Up Station : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. The seat is made from Rotomoulded LLDPE. Bearings : Maintenance-free ball bearings. Equipment which have sway and moving parts, must have built in limitors that prevent unwanted and ecesssive movement, which can cause injuries. The limitors must be in accordance with EN16630 safety norms. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 1365 MM x 1335 MM x 700 MM . Capacity 2 persons								
	HD SIT UP STATION	Unit					5.00		
		5.00	1						
							5.00	156250.00	**781250.00**
229	Supply & fixing of HD Squat Pushing : All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out a minimum of 100 public park projects in India with EN16630-GS certified products either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory during technical bid. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. The seat and backrest is made from Rotomoulded LLDPE. Bearings : Maintenance-free ball bearings. Equipment which have sway and moving parts, must have built in limitors that prevent unwanted and ecesssive movement, which can cause injuries. The limitors must be in accordance with EN16630 safety norms. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 2270 MM x 635 MM x 1640 MM . Capacity 2 persons								
	HD SQUAT PUSHING	Unit					5.00		
		5	1						

						5.00	268750.00	**1343750.00**
Supply & fixing of HD Waist Twister :All products must tested and certified to meet EN16630 safety standards with GS test mark. The EN16630 certificates must be issued by a reputed notified International Certifying Body such as IPEMA, TUV, CPSC, or SGS only. The GS mark-EN 16630 certificates must be in the name of a supplier who has carried out in excess of at least 50 public park projects in India either by themselves or through their dealers or contractors. These EN16630 & GS Mark certificates must be clearly displayed on the notified certifying bodies websites as online verification is mandatory. All products must clearly display the GS mark as has been issued in the EN16630 safety certificates. All Tubular steel of 2.5mm thickness are galvanized and zinc dipped. Joints are Robotic Welded. All welded joints are scalloped as necessary and welded to an approved MIG process. All welds are dressed off removing all sharp edges & burrs. Zinc Primer paint is applied at all the welding paints prior to finishing. All metal parts are powder coated using AKZO Nobel - Great Wall Powder to the thickness of 80 - 120 microns. All metal parts are tested in our salt spray machine that uses a 5% NaCL solution in accordance to ISO7227 to speed up corrosion for 3000 hrs. Footplates made of alloys of Nylon having good thermal stability. Internal Limited means no bump stops or crush points. Bearings : Maintenance-free ball bearings. Scope of delivery : 1 completely pre-assembled equipment modules. Maintenance : Maintain according to EN16630 and the maintenance guide. Size (L*W * H) 1460 MM x 1310 MM x 1150 MM . Capacity 3 persons								
HD WAIST TWISTER	Unit							
	3.00	1				3.00		
						3.00	162500.00	**487500.00**
CHILDREN'S PLAY EQUIPMENT								
Supply and fixing of childern Multi Play Equipment with curved slide and number panel : Upright structural posts of height 2.4 m, 2.7 m, 3.3 m schedule HOT DIP Galvanized steel with a 114mm OD and 2.2mm (wall) thickness of the tubing. All metal components are to be finished with a baked on powder coat finish.With deck of size 1.45 x 1.45m and Staircase of size 1.5m x 0.77 m are fabricated from 2mm perforated solid punched steel. Deck perimeter is precision pre punched for attachments. Decks are pressed, punched, and welded sand blasted and vinyl plastic coated to a thickness of 4mm. Along with Handrail of height 2.2 m and Dia 32 mm shall be an all-robotic welded unit, fabricated from 32 O.D. galvanized steel pipes with a baked on powder coating finish.Curved Slide of size 1.94 m x 1.85 m x 2.4 m, Panels,Toprails. Of Monkey loop of size 1.8 m x 1.3 m.Deck of size 1.45 x 1.45m are fabricated from 2mm perforated solid punched steel. Deck perimeter is precision pre punched for attachments. Decks are pressed, punched, and welded sand blasted and vinyl plastic coated to a thickness of 4mm. Roof of size Dia 2 m and height 0.82 m, Spiral Slide of size 1.16 m x 1.6 m x 3.6 m, Panels The rates are to be inclusive of supply and installation at site.								
SCARBOROUGH - E	Unit							
	1.00	1				1.00		
						1.00	3879483.00	**3879483.00**
Supply and fixing of childern Multi Play Equipment with curved slide and number panel : Upright structural posts of height 2.4 m, 2.7 m, 3.3 m schedule HOT DIP Galvanized steel with a 114mm OD and 2.2mm (wall) thickness of the tubing. All metal components are to be finished with a baked on powder coat finish.With deck of size 1.45 x 1.45m and Staircase of size 1.5m x 0.77 m are fabricated from 2mm perforated solid punched steel. Deck perimeter is precision pre punched for attachments. Decks are pressed, punched, and welded sand blasted and vinyl plastic coated to a thickness of 4mm. Along with Handrail of height 2.2 m and Dia 32 mm shall be an all-robotic welded unit, fabricated from 32 O.D. galvanized steel pipes with a baked on powder coating finish.Curved Slide of size 1.94 m x 1.85 m x 2.4 m, Panels,Toprails Of Monkey loop of size 1.8 m x 1.3 m.Deck of size 1.45 x 1.45m are fabricated from 2mm perforated solid punched steel. Deck perimeter is precision pre punched for attachments. Decks are pressed, punched, and welded sand blasted and vinyl plastic coated to a thickness of 4mm. Roof of size Dia 2 m and height 0.82 m, Spiral Slide of size 1.16 m x 1.6 m x 3.6 m, Panels The rates are to be inclusive of supply and installation at site.								
SCARBOROUGH - E	Unit							
	1.00	3				3.00		
						3.00	2201295.00	**6603885.00**

Supply and fixing of childern Play Equipment Fiero A Swing : Shaped structural posts of height 2.31 m are to be schedule HOT DIP Galvanized steel with a 114mm OD and 2.2mm (wall) thickness of the tubing. Plastic Components such as swing seats [super thick plastic] shall be animated and shall be rotationally molded from antistatic, copolymer, virgin linear low density UV stabilized polyethylene, with color molded in and minimum thickness of 6 - 8mm. The rates are to be inclusive of supply and installation at site.								
FIERO A SWING	Unit							
	1.00	3				3.00		
						3.00	126892.00	**380676.00**
Supply and fixing of childern Play Equipment Four Seater Seesaw : SPECIFICATIONS The See Saw consists of 2 poles of Dia 114mm and thickness of 2.5mm which balances the horizontal rod at the center which is of size 3110 mm length and Dia 114 mm. It consists of 4 seats which is made of LLDPE virgin plastic of size 305mm X 213 mm X 125 mm. The rates are to be inclusive of supply and installation at site.								
FOUR SEATER SEESAW	Unit							
	1.00	3				3.00		
						3.00	107240.00	**321720.00**
Executive bench made out of sadaralli grey stone with hand suport 3 line finishing with arch desiagn with 100cm slabs height 90% length 45cms (data approved rate)								
Stone Benches	No's							
FOUR SEATER SEESAW		50				50.00		
						50.00	18450.00	**922500.00**
Approved Data Rate	**18450.00**							
							Total of KPWD SR 2018-19	**5587080.70**
							Total Construction Cost	**28731594.70**
							12% GST on KPWD 2018-19 items	**670449.68**
							Cost towards Preparation of DPR and PMC / Third Party inspection LS	**588041.00**
							Sub Total	**29990085.38**
							Miscellaneous and rounding off	**9914.62**
							Total	**30000000.00**

Certificate.

1. The rates adopted based on the PWD SR, Bangalore circle for year 2018-19.
2. The provisions made in the estimate are necessary and essential.
3. The workspot was inspected and work is found to be necessary.
4. The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Technical Sanction
Accorded For Rs 300.00 lakhs only
Head of A/C 83658
CER NO : 86 **Dt:** 20.09.2019

TA to CE (YNK)

For Tejus Consultants

Assistant Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Executive Engineer

Executive Engineer 19/9/19
Project Division
Yelahanka Zone
BBMP, Bangalore-92

Administrative Approval
Accorded For Rs. 300.00 lakhs only
Head of A/C 83658
CER NO : 72 **Dt:** 07/03/2020

E.E. (Project) 7/3